ESTABLISHING AND MAINTAINING FIREBREAKS IN THE CONSERVATION RESERVE PROGRAM (CRP)

BACKGROUND

Firebreak establishment may be considered primarily in five practices:

CP2	**Establishment of Permanent Native Grasses**
CP3/CP3A	**Tree Planting**
CP4D	**Permanent Wildlife Habitat (Native Grass Areas)**
CP11	**Trees Already Established (Pines)**

Landowners may also perform prescribed burns on several other practices under the required mid-management treatments. Barren (disked) firebreaks are not allowed in CRP unless high risk areas such as roads and structures need protection. Green firebreaks are encouraged to be established during the establishment of the practice, when the landowner plans to use prescribed burns. Green firebreaks may also be installed after the permanent cover is established. The establishment of green firebreaks must be scheduled in the CRP contract prior to performing the practice.

Generally, there are four (4) types of firebreaks:

1. **Natural Firebreak** – Structures or land features such as a road, water body, cattle, or game trail that may serve as a firebreak. Low residue crop fields can also act as natural firebreaks.
2. **Disked (Barren) Firebreak** – Firebreak created by disking on a non-erosive area to expose mineral soil free of fuel.
3. **Green Firebreak** – Firebreak created by stimulating the growth of COOL SEASON annuals or perennials. Growth is usually stimulated by mowing, disking, planting, fertilizing, or concentrating grazing in the fall prior to a late winter or spring burn. Erosion potential must be considered with annuals.
4. **Mowed Firebreak** – Firebreak mowed prior to the burn to reduce standing fuel, but without sufficient time to produce a green firebreak. This is the mowing of existing vegetation that may or may not consist of cool season plants.

Disked firebreaks may be safest due to the potential to almost completely eliminate the vegetation (fuel). Although disked firebreaks are not allowed in the CRP, utilizing the mid-management practice of strip disking in combination with burning is permissible.

Mowed firebreaks reduce, but do not completely eliminate fuel. Mowing may accelerate accumulation of fuel (dead grass) that could allow a fire to creep across the firebreak. The value of this firebreak may depend on the ability to add a water (wet) line, fire retardant (chemical) line, or have equipment on hand to prevent the fire from crossing through the clipped fuel. An additional treatment would be to hay it or mechanically rake clippings away from the planned burn area.

The key to a green firebreak is to have the proper plant community and manage that community to have the least amount of fuel and "green up" of the vegetation at the time the burn is planned. A proper plant community should be a cool-season turf grass (low growing) or cool-season annual. The plant community should be tolerant of mowing, haying, or grazing closely (generally within 3-4 inches) without damaging the stand. Firebreaks should be as straight as possible to predict fire and smoke behavior and enhance visual monitoring of the fire's edge.

NOTE THAT ANY HAYING OR GRAZING OF CRP CONTRACTS HAS RESTRICTIONS, MUST BE APPROVED BY THE FARM SERVICE AGENCY COUNTY COMMITTEE, AND MUST BE SCHEDULED IN THE CONTRACT.

GREEN FIREBREAK ESTABLISHMENT RECOMMENDED PLANT MIXTURES (General List; Not All Inclusive)

PERENNIAL*	ANNUAL
(a) Orchardgrass and White Clover	(a) Winter Wheat
(b) Tall Fescue and White Clover	(b) Annual Ryegrass
(c) Virginia Wildrye (Good Against Forest Edges)	(c) Oats (Cold Tolerant)
(d) Kentucky Bluegrass	(d) Winter Barley
	(e) Cereal Rye
	(f) White, Red, or Crimson Clover

*Lower wildlife value and may be less effective due to prior growth residue.

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Perennial plantings should be considered as a component of the appropriate CRP practice and the firebreak established as a part of establishing the required practice cover. Annual plantings should be considered at the time of performing a mid-management treatment and in conjunction with performing the mid-management option of strip disking, based on the scheduled timing of the strip disking. Annual Plantings can also serve as a CP12 (food plot) planting, providing winter forage for grazing game such as deer and turkey. If annuals (small grains) are to be utilized as a CP12 food plot, the contract must reflect this and be associated with practices CP1, CP2, CP3, CP4D, CP10, or CP11.

The seeding rates and dates found in Tennessee 2-CRP or University of Tennessee publication PB-378 should be referred to for green firebreak establishment with the above plant materials.

Areas to be protected from burns may need to be surrounded by firebreaks (e.g., wooded areas, shrub communities, excessively steep slopes, concentrated flow areas).

GREEN FIREBREAK DESIGN WIDTH

Minimum – 30 feet
Maximum – 40 feet
(This is a program establishment limit to ensure the majority of the field consists of the required permanent practice cover.)

- Width should be increased with increasing slopes. Slopes greater than 20 percent should be at the maximum design width.
- Width should be increased with increased volatility of fuels (i.e., brush).
- The design width should always be increased during the burn by backfiring into the field to be burned. The burned portion should be at least 50 feet wide before considering a head fire.

FIREBREAK MANAGEMENT

Mid-management practice of strip disking performed in the fall:

- Sow an annual after disking that will be green between February 1 and April 14.

Mid-management practice of strip disking performed in the spring:

- Strip disk as early as possible in February to allow time to burn prior to the nesting season.
- Begin disked strips along field borders, widths at least 30 feet wide.
- Be careful of underlying dead grass that may still carry fire across the break.
- Redisk the day before the burn, if necessary, to remove regrowth.

Perennial green firebreak:

- Mow close late in the fall; let residue decay over winter. Avoid mowing immediately before the burn.
- Mow monthly at least two months prior to the burn. The last cutting should be raked away from the planned burn area.
- Graze close during fall, winter, and/or spring period prior to the scheduled burn.
  - Restrictive grazing rules allow grazing once every three years outside the nesting season.
  - Use temporary fence to concentrate grazing on firebreak.
- Hay the firebreak or rake cuttings away from area to be burned.
  - Restrictive grazing rules allow haying once every three years outside the nesting season.
  - Note that baling typically leaves litter and debris piles that can compromise the firebreak.
- Lime and fertilize as needed during the contract period to maintain a uniform stand of the preferred plant community. Too much encroachment of weeds and volunteer plants will affect the desired “green up.”